

AMENDMENTS

IN THE CLAIMS:

1. (Previously presented) A dynamically configurable wireless communication system comprising

a mobile device configured with a central portable compute, command and control means for voice and data information,

a central server,

means for wired or wireless communication between the mobile device and the central server,

means for defining one or more functional instructions/instruction sets in software within the mobile device and/or the server for use in a specific application and a related utility;

means for storing one or more functional instructions/instruction sets within the mobile device and/or the server;

means for selection of one or more functional instructions singly and or in combination as an instruction set by the mobile device user for a selected function and utility;

means for a selected first functional instruction/instruction sets to enable a first function and utility on the mobile device;

means for a selected second functional instruction/instruction sets to enable a second function and second utility on the mobile device;

means for enabling one or more different and distinct functions on the mobile device whereby the mobile device user is provided one or more selected second utilities; including

means for said selected functional instruction/instruction sets to be accessed from storage locations within the mobile device itself or accessed from storage locations within a central server; including accessing said functional instructions from a combination of the mobile device and the central server;

means for processing said functional instructions within the mobile device utilizing the processing capabilities of the mobile device itself in a standalone manner; including

means for processing said functional instructions within the central server utilizing the processing capabilities of the central server itself in a standalone manner; further including

means for processing said functional instructions utilizing the processing capabilities of the mobile device and the central server in combination;

means for converting the mobile device from a first function and utility to a selected second function

and utility in real time or at a selected time to provide the mobile device user multiple utility with the same physical device.

2. (Previously presented) The system of claim 1 wherein the wireless device comprises a hand-held computing device including

means for defining said computing device to perform one or more additional or alternate selected functions to provide the user a selected utility;

means for said computing device to provide enhanced utility to the user at a selected time and in a selected manner wherein said additional and alternate utilities enable audio, video, voice, graphics, images, data and other information in a standalone manner utilizing the functional instructions, storage and processing capabilities of the wireless computing device itself or by utilizing the storage and processing capabilities of the central server or a combination of the capabilities of the computing device and the central server.

3. (Previously presented) The system of claim 2 wherein the hand-held computing device is configured for an alternate or additional function and utility as a wireless telephone; including

means for said computing device to provide alternate/additional utility to the user as a wireless telephone at a selected time and in a selected manner wherein said wireless telephone capabilities are enabled in a standalone manner utilizing the functional instructions, storage and processing capabilities of the wireless computing device itself or by utilizing the storage and processing capabilities of the central server or a combination of the computing device and the central server; including

means for a device originally configured as a wireless telephone to perform the additional/alternate functions of a mobile computing device.

4. (Previously presented) The system of claim 2 wherein the hand-held computing device is configured for an alternate or additional function and utility as a cellular phone; including

means for said computing device to provide alternate/additional utility to the user as a cellular telephone at a selected time and in a selected manner wherein said cellular telephone capabilities are enabled in a standalone manner utilizing the functional instructions, storage and processing capabilities of the wireless computing device itself or by utilizing the storage and processing capabilities of the central server or a combination of the capabilities of the computing device and the central server; including

means for a device originally configured as a cellular telephone to perform the additional/alternate

functions of a mobile computing device.

5. (Previously presented) A dynamically configurable wireless communication and control device and system comprising

a wireless device configured with a central portable compute, command and control means for voice and data information,

a central server,

means for wired or wireless communication between the wireless device and the central server;

means for defining one or more communication and control protocols in software within the wireless device and/or the server for use in a specific application and a related communication and or control utility; including

means for acquiring one or more communication and control protocols from sources external to the wireless device and the central server for use by/installation onto a wireless device and or a central server;

means for storing one or more communication and control protocols within the mobile device and/or the server for use in conjunction with a selected functional instruction set; including

means for storing one or more functional instructions/instruction sets within the mobile device and/or the server for use in conjunction with a selected communication and or control protocol;

means for selection of one or more functional instructions, communication protocols and control protocols singly and or in combination as a functional, communication and control instruction set by the mobile device user for a selected first communication, control and functional utility;

means for a selected first functional, communication and control instruction/instruction sets to enable one or more different and distinct communication protocols, control protocols and functional capabilities on the mobile device whereby the wireless device user is provided a selected second communication, control and functional utility; including

means for said selected functional, communication, control instruction/instruction sets, communication protocols and control protocols to be accessed from storage locations within the wireless device itself or accessed from storage locations within a central server; including accessing said functional instructions, communication protocols and control protocols from a combination of the wireless device and the central server;

means for processing said functional instructions, communication protocols and control protocols within the wireless device utilizing the processing capabilities of the wireless device itself in a standalone manner; including

means for processing said functional instructions, communication protocols and control protocols within the central server utilizing the processing capabilities of the central server itself in a standalone manner; further including

means for processing said functional instructions, communication protocols and control protocols utilizing the processing capabilities of the wireless device and the central server in combination;

means for converting the mobile device from a first functional, communication and control utility to a selected second functional, communication and control utility in real time or at a selected time to provide the wireless device user enhanced utility with the same physical device for a plurality of communication modes seamlessly.

6. (Previously presented) The system of claim 5 wherein the wireless device comprises a stationary or portable computing device including

means for configuring the device for one or more communication modes utilizing a selected first communication protocol, a second communication protocol or a nth communication protocol; including

means for configuring the device for one or more control modes utilizing a selected first control protocol, a second control protocol or a nth control protocol; including

means for configuring the computing device for one or more functions, communication protocols, control protocols and a selected utility at a selected time and in a selected manner.

7. (Previously presented) The system of claim 6 wherein the hand-held computing device is a wireless telephone enabled for operation with one or more communication and or control protocols.

8. (Previously presented) The system of claim 6 wherein the hand-held computing device is a cellular phone enabled for operation with one or more communication and or control protocols.

9. (Previously presented) The system of claim 5 where the mobile device is an IP based telephone enabled for operation with one or more communication and or control protocols including cordless, cellular, Wi-Fi and other protocols.

10. (Previously presented) The system of claim 5 where the mobile device is an intelligent appliance enabled for operation with one or more communication and or control protocols including cordless, cellular, Wi-Fi, IP and other protocols.

11. (Previously presented) The system of claim 6 where the intelligent mobile device is performs the functions of a computing device, a control device, a command device, an intelligent appliance, a wireless telephone, or cellular phone or an IP based telephone, a audio player/recorder or a video player/recorder or a remote controller singly or in combination, at a selected time and in a selected manner to provide the selected utility to the device user.

12. (Previously presented) A wireless communication and control system including a wireless device that has a built in multi channel multiplexing transmitter and receiver and further comprising:

said multi channel multiplexing transmitter and receiver configured for communication on one or more input and outputs;

means for storing functional instructions, communication protocols and control protocols within the wireless device;

central server means for storing functional instructions, communication protocols and control protocols;

means for communicating on one or more inputs and outputs of the wireless device the communication protocols and selectively communicating the control protocols between the wireless device and the central server means;

communication protocol means for configuring the system for communication on one or more inputs and outputs of the wireless device;

first control protocol means for configuring the system as one of a selection of intelligent appliance controllers; and

second control protocol means for alternately configuring the system as one of a selection of Internet terminals;

means for communication and control of one or more intelligent devices and appliances external to the wireless device by selective communication means on one or more selected input and outputs of the mobile device; including

means for said communication and control tasks utilizing an input or output which is multiplexed to provide enhanced communication and control utility for interfacing with multiple intelligent appliance simultaneously, sequentially or at a selected time; including

means for dynamically configuring by selectively utilizing one or more functional instructions such that the single wireless device is enabled for a plurality of functions and utilities by means of communication and control on one or more inputs/outputs of the MMTR configured wireless device;

means for operation of the MMTR enabled wireless device in a standalone manner utilizing the storage and processing capabilities of the wireless device in a standalone manner, utilizing the storage and processing capabilities of the server or a combination of the wireless device and the server.

13. (Previously presented) A mobile communication system comprising
- a mobile device configured with input, output and or display for communication of voice and data,
- local, central and or network server,
- means for wired or wireless communication,
- means for dynamically configuring the mobile device for one or more functions including communication, computation, command, sense and control,
- means for leveraging the processing power, storage and database capabilities of the mobile device in a stand alone manner; and or in conjunction with the processing power, storage and database capabilities of the local, central and or network server for enabling dynamic reconfiguration of the mobile device for the desired functions at the desired time.
14. (Previously presented) A mobile communication system of claim 13 comprising
- means for storing a plurality of mobile device functionality instructions on the mobile device and or the local, central and or network server;
- means for modifying and generating a plurality of new mobile device functionality instructions by means of the mobile device and or the servers;
- means for independently configuring the mobile device functionality in a stand alone manner and or in conjunction with a local, central or network server;
- means for using the mobile device functionality instructions in the desired manner and at the desired time.
15. (Previously presented) A mobile device communication system of claim 13 comprising
- means for dynamically configuring the full or partial functionality of the mobile device by software means without altering the hardware configuration,
- means for the functional instruction software to be resident on the mobile device and or on a local, central and or network server,
- means for using the functional instruction software resident on the mobile device in a stand alone manner and or in conjunction with the functional instruction software resident on the local, central and or network server,
- means for enabling a plurality of mobile device functionalities with the existing hardware

configuration.

16. (Previously presented) A mobile communication system of claim 13 comprising

means for enabling one or more specific dynamic mode configurations of the mobile device for desired utility such as cell phone, PDA, remote controller, IP phone and others;

means for enabling and associating one or more user profiles with the selected mode configuration;

means for storing a plurality of mode configurations, user profiles, functional instructions, program instructions and other enabling tools on the mobile device itself and or the local, central and or network server;

means for dynamically reconfiguring and utilizing the desired mode configuration and or the desired user profile by means of the functional instructions and program instructions in conjunction with the processing power, storage and databases of the mobile device by itself and or in conjunction with the processing power, storage and databases of the local, central and or network server.

17. (Previously presented) A mobile device communication system of comprising

a mobile device which is configured for one or more input and output channels of communication

means for enabling voice communication on one channel of a mobile device,

means for enabling data communication on same or different channel of a mobile device,

means for sequential or simultaneous communication on a selected communication channel by multiplexing or other methods,

means for enabling a plurality of communication methods, communication types and functions on a selected channel.

18. (Previously presented) A mobile device communication system comprising

mobile device

a local, central and or network server,

means for wired or wireless communication,

means for enabling the mobile device for voice and data communication on one or more selected input and output channels ; and or

means for enabling the mobile device for communication of audio, video, data, broadcast and or other

communication on one or more input and output channels,

means for enabling dynamic reconfiguration by means of functional instructions, program instructions and or other means wherein the instructions are resident on the mobile device and or the servers,

means for dynamically or at a desired time selecting the desired communication parameters such as the frequency, power and communication protocols for reconfiguring one or more input and output channels; and or

means for dynamically or at a desired time altering and modifying the full or partial functionality of the mobile device in a stand alone manner using the processing power, storage and data bases of the mobile device in a stand alone manner and or in conjunction with the processing power, storage and data bases of the local, central and or network servers; and or

means for altering and modifying the functionality of the desired input and output channels of the mobile device, and or

means for multiplexing one or more of the input and one or more of the output channels for the desired communication, computation, command and control functions; and or

means for dynamically and or at the desired time configuring the mobile device for a plurality of interfaces for one or more types of input, output and display.

19. (Previously presented) A mobile device communication system comprising

mobile device

a local, central and or network server

means for wired or wireless communication

means for dynamic signaling and sensing of the communication environment, the communication methods, communication parameters and or the functional instructions, by radio frequency signaling and or other methods;

means for enabling disparate communication methods by dynamically adjusting communication parameters such as the frequency of transmission/receiving, power levels and other parameters which are best suited to a specific environment by functional instructions or other means,

means for dynamic switching of the communication parameters for transition from one communication environment and or communication method to another;

means for enabling the single mobile device to perform a plurality of same or disparate functions on one or more channels;

means for a mobile device to transform itself dynamically to execute a multiplicity of desired functions, on one or more input and output channels, by utilizing the processing power and software

resident in the mobile device itself and or in conjunction with the processing power and software resident on the servers.

20. (Previously presented) A mobile device communication system of claim 19 comprising

means for dynamically and independently tuning one or more input and output channels of the mobile device,

means for dynamically and independently tuning the input and output channels based on various parameters such as power, frequency, signal to noise ratio, desired and allowable error rates for data transfer and other factors;

means for dynamically optimizing the performance of the mobile device for efficient operation in the desired environment.

21. (Previously presented) A mobile device communication system of claim 19 comprising

means for the mobile device to bypass the public carrier operating frequencies for voice and or data communication on one or more input and output channels;

means for communication of voice and data using the desired home, office, factory, transportation system or other operating frequencies using the desired input and output channels of the mobile device; and or

means for contemporaneous operation on public carrier and or private carrier frequencies on the selected input and output channels of the mobile device.

22. (Previously presented) A mobile device communication system of claim 19 comprising

a Global Positioning Server,

means of wired or wireless communication with the GPS server,

means for determining the geographical location of the mobile device,

means for sensing the macro and micro communication environments in a selected environment and location wherein the mobile device is present,

means for dynamically selecting the desired communication methods and communication parameters on one or more input and output channels of the mobile device,

means for enabling the desired communication on one or more input and output channels of the mobile device.

23. (Previously presented) A mobile device communication system of claim 19 comprising

means for the mobile device to be enabled with a sleep mode and or watch dog mode on one or more input and output channels,

means for instantaneously switching from a sleep mode and or watch dog mode to an active mode on one or more desired input and output channels of the mobile device,

means for sensing the communication environment by the mobile device,

means for the mobile device to sense other mobile devices,

means for the mobile device to sense using a plurality of communication methods inclusive of radio frequency and or other means,

means for the mobile device to sense one or more servers,

means for the mobile device to execute the desired communication and desired functions at the desired time and in the desired sequence.

24. (Previously presented) A mobile device communication system of claim 19 comprising

means for the mobile device to operate in a wireless manner on one or more input and output channels,

means for the same mobile device to operate in a wired manner on one or more input and output channels

means for the selection and enabling of the desired input and output channels of the mobile device for wired or wireless communication.

25. (Previously presented) A mobile device communication system of claim 19 comprising
means for enabling a selection of a plurality of communication modes on one or more input and output channels of the mobile device,

means for selecting and enabling a primary communication mode on one or more input and output channels of the mobile device,

means for selecting and enabling a secondary communication mode on one or more input and output channels of the mobile device,

means for enabling a hierarchy of communication modes on a mobile device for communication at a desired time and in desired order on one or more input and output channels,

means for instantaneously, dynamically or in a delayed manner enabling the desired communication mode on the desired input and output channel of the mobile device.

26. (Previously presented) A mobile device communication system comprising

a mobile device,

local, central and or network servers,

means for wired or wireless communication using public carrier communication loops, private carrier communication loops, office/factory communication loops and home communication loops, said loops operating with same or disparate communication methods and or communication parameters for wired or wireless communication in a selected environment;

means for the mobile device to instantaneously recognize the communication environment and determine the nature of the public, private, office, factory, transportation or home carrier communication methods and communication parameters,

means for selecting instantaneously and or at a desired time and switching the carrier(s) for desired communication on a desired input and output communication channel of the mobile device;

means for operation with one single mobile device in multiple carrier environments on one or more input and output channels of the mobile device;

means for operation by the mobile device in a standalone manner and or in conjunction with a local, central and or network server.

27. (Previously presented) A mobile device communication system of claim 26 comprising

means for voice, data and video communication on one or more channels of the mobile device,

means for maintaining a plurality of functional instructions on the mobile device and or the network servers,

means for enabling the mobile device to be configured for wired or wireless remote command and control applications such as TV, entertainment, gaming, appliance control, intelligent appliance control, intelligent sensing and control, intelligent equipment control and other control applications for the home, office, transportation systems, factory and other applications;

means for a plurality of same or different control applications being enabled sequentially or contemporaneously on one or more input and output channels of the mobile device;

means for enabling the control applications using the processing power, storage and databases of the mobile device by itself and or in conjunction with the processing power, storage and databases of the

local, central and or network server.

28. (Previously presented) A mobile device communication system of claim 26 comprising

means for voice, data and video communication on one or more channels of the mobile device,

means for maintaining a plurality of functional instructions on the mobile device and or the network servers,

means for dynamically configuring the mobile device with a plurality of functional instructions on one or more channels;

means for enabling the emulation of the mobile device for one or more same or disparate functions;

means for enabling the mobile device to emulate and perform the functions of a cordless telephone, a cellular telephone, a PDA, an Internet Protocol based IP telephone and other disparate computation, communication, command and control device functions on one or more input and output channels of the mobile device;

means for the communication, command, control and computation functions to be emulated and enabled by using the processing power/storage and databases of the mobile device by itself and or in conjunction with the processing power, storage and databases of the local, central and or network server.

29. (Previously presented) A mobile device communication system of claim 26 comprising

means for the mobile device to be dynamically assigned a plurality of identification numbers,

means for the identification means to include a plurality of identification methods such as telephone numbers, static IP address number, dynamic IP address number and other numbers;

means for the mobile device to be dynamically configured for voice and data communication,

means for using one or more of the telephone numbers and other identification numbers sequentially or contemporaneously on the same mobile device for desired communication,

means for recognizing and relating the incoming and outgoing communications with the telephone number means and or other identification number means by visual, audible and other input, output, display and interface methods;

means for communication on one or more input and output channels of the mobile device with same or disparate identification numbers and or communication methods; and or

means for dynamically configuring the mobile device for communication and operation using the Internet Protocol, IP, based communication methods and or non IP based communication methods, on

one or more input and output channels of the mobile device, for sequential or contemporaneous use means for dynamically switching between the IP mode and non IP mode for communication on one or more input and output channels of the mobile device by software means, functional instructions or other methods,

means for dynamically enabling the communications of voice, audio, video and data in the IP mode and or non IP mode on the mobile device by utilizing software means, functional instructions means and or other methods with or without altering the hardware configuration of the mobile device

means for enabling the operation in the IP mode and or non IP mode by using the processing power, storage and databases of the mobile device in a standalone manner and or in conjunction with the processing power, storage and databases of the local, central and or network server.

30. (Previously presented) A mobile device communication system comprising

a mobile device,

local, central and network servers,

a network control box having one or more input and output channels,

means for wired or wireless communication by the network control box on one or more channels using one or more communication methods and associated communication parameters;

means for selection and operation of the channels of the network box at one or more transmit and receive frequencies, power levels, signal to noise ratios and bandwidths;

means for interfacing between the mobile device and the network control box by using wired or wireless communication methods in a bilateral manner and or in conjunction the local, central and or network server

means for the network control box to operate at one or more public carrier, private carrier, office loop, home loop and other communication frequencies and modes;

means for the mobile device to operate in conjunction with the network box by selecting the desired communication mode and the communication loop appropriate for the intended communication on the selected input and or output channels of the mobile device and or the network control box;

means for managing the operation of the network control box by functional instructions resident within the network control box and or derived from the mobile device acting by itself and or in conjunction with a local or network server

means for the network control box input and output channels to be dynamically configured for communication in same or different communication modes,

means for configuring the network control box for desired utility by the mobile device acting in a stand alone manner and or in conjunction with the local, central and or network server.